

REMARKS/ARGUMENTS

In this Amendment After Final Under 37 C.F.R. § 1.116 (“Amendment After Final”), Applicant proposes to amend claim 6 in order to present the claims in better form for consideration on appeal and to improve clarity. No new matter is introduced.

No amendments are made in response to the rejection of the Final Office Action.

Prior to entry of the Amendment After Final, claims 1-18 were pending in the application. After entry of the Amendment After Final, claims 1-18 remain pending in the application.

In the Office Action, the Examiner rejected claims 1-18 under 35 U.S.C. § 112, ¶ 1 (written description). Applicant respectfully traverses the Examiner’s rejection.

Translation of Matsuura

As discussed in the Amendment Under 37 C.F.R. § 1.111 (“Amendment”) filed on August 20, 2007, Applicant notes that the Examiner ordered an English-language translation of Japanese Patent Publication No. 04-249121 A to Matsuura (“Matsuura”). In the Amendment, Applicant requested that the English-language translation be made available to the Applicant in the next paper mailed by the U.S. Patent and Trademark Office (“USPTO”). However, the Final Office Action did not include such a translation of Matsuura.

In this Amendment After Final, Applicant reiterates Applicant’s request that the English-language translation be made available to the Applicant in the next paper mailed by the USPTO and, to the extent the Examiner relies on “additional facts that may be contained in the underlying full text document”, that the next Office Action be made non-final in light of MPEP § 706.02 II.

Rejection Under 35 U.S.C. § 112, ¶ 1

In the Final Office Action, the Examiner alleged that: (1) “flowing substantially parallel to the top and bottom surfaces” and “measured in a plane substantially parallel to the top and bottom surfaces” are negative limitations; (2) both recitations are “without concrete support in the original specification”; and (3) the “original specification does not provide support explicitly or implicitly” for either recitation. Office Action, p. 2/§ 1. Applicant respectfully disagrees with all three allegations.

First, neither “flowing substantially parallel to the top and bottom surfaces” nor “measured in a plane substantially parallel to the top and bottom surfaces” is a negative limitation. As defined in Landis on Mechanics of Patent Claim Drafting (5th ed., Jul. 2007) (“Landis”), a “negative limitation” is a “claim limitation telling what an element is not, instead of what it is; or what [it] does not do, instead of what it does.” Landis, App. D-16.

Neither “flowing substantially parallel to the top and bottom surfaces” nor “measured in a plane substantially parallel to the top and bottom surfaces” includes “negative” language, such as “unobstructed,” “without,” “in the absence of,” “excepting,” “non-resilient,” “other than,” “non-poisonous,” “non-alcoholic,” or “absent.” Additionally, although “flowing substantially parallel to the top and bottom surfaces” and “measured in a plane substantially parallel to the top and bottom surfaces” distinguish over Bigler, Inoue, Matsuda, Matsuura, Park, Shibata, Shin, Suetaki, and the other art of record, they tell what the associated element is and/or does, as opposed to what the associated element is not and/or does not do. For at least these reasons, neither “flowing substantially parallel to the top and bottom surfaces” nor “measured in a plane substantially parallel to the top and bottom surfaces” is a negative limitation.

Second, there is no requirement that recitations added to a claim during prosecution have support in the original specification. Instead, they must have support in the original disclosure. MPEP 2163 II.A.3(b). As discussed below, Applicant submits that the original disclosure provides proper written description support under 35 U.S.C. § 112, ¶ 1, for both “flowing substantially parallel to the top and bottom surfaces” and “measured in a plane substantially parallel to the top and bottom surfaces.”

Third, Applicant is unable to ascertain the scope of the term “concrete support.” Applicant submits that the Examiner’s use of this term is indefinite and inconsistent with the requirements of 35 U.S.C. § 112, ¶ 1; 37 C.F.R. § 1.121(f); and MPEP 2163 II.A.3(b); among others.

Fourth, Applicant notes that “[t]o comply with the written description requirement of 35 U.S.C. 112, para. 1, . . . each claim limitation must be expressly, implicitly, or inherently supported in the originally filed disclosure.” MPEP 2163 II.A.3(b) (emphasis added). As a result, Applicant submits that the Examiner’s rejection is based on an improper standard (“explicitly or implicitly”) that is inconsistent with the requirements of 35 U.S.C. § 112, ¶ 1; 37 C.F.R. § 1.121(f); and MPEP 2163 II.A.3(b); among others.

Fifth, Applicant submits that the recitations at issue are supported in the originally filed disclosure expressly, implicitly, and/or inherently.

For example, as discussed in paragraphs [0029] and [0039], “FIG. 7 illustrates the angles formed between the direction of the flow of the mold resin and adjacent sides of a unit chip” and “As illustrated in FIG. 7, the flow of the molding resin will form angles α and β with adjacent side surfaces of the chip.” As expressly shown, angles α and β are measured in a plane that includes the four side surfaces of the semiconductor chip and, thus, in a plane substantially

parallel to the top and bottom surfaces. And as a result of the advancing mold resin flow boundary, the mold resin contacts the two closest side surfaces of the semiconductor chip flowing substantially in that same plane parallel to the top and bottom surfaces of the semiconductor chip, as also expressly shown.

Additionally, Applicant submits that one of ordinary skill in the art would understand the discussion of the conventional art (e.g., paragraphs [0011] – [0015], FIG. 1B, and FIG. 3) to disclose both mold resin flowing substantially parallel to the top and bottom surfaces of the semiconductor chip and mold resin flowing so that it contacts the closest side surface of the semiconductor chip at an angle of about 90°, measured in a plane substantially parallel to the top and bottom surfaces. As a result, Applicant submits that one of ordinary skill in the art would understand the discussion of the present invention to implicitly disclose mold resin flowing substantially parallel to the top and bottom surfaces of the semiconductor chip and mold resin flowing so that it contacts closest side surfaces of the semiconductor chip at an angle of less than about 70°, measured in a plane substantially parallel to the top and bottom surfaces.

Applicant also submits that one of ordinary skill in the art would understand the discussion of the present invention (e.g., paragraph [0037] and FIG. 5) to inherently disclose mold resin flowing substantially parallel to the top and bottom surfaces of the semiconductor chip and mold resin flowing so that it contacts closest side surfaces of the semiconductor chip at an angle of less than about 70°, measured in a plane substantially parallel to the top and bottom surfaces.

For all of these reasons, Applicant submits that the Examiner's rejection under 35 U.S.C. § 112, ¶ 1, is improper and requests that it be withdrawn.

Request for Reconsideration and Allowance

Accordingly, in view of the above amendments and remarks, reconsideration of the rejection and allowance of each of claims 1-18 in connection with the present application is earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

If necessary, the Director of the USPTO is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; in particular, extension of time fees.

Respectfully submitted,

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By _____

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